

## AXIAL LEAD / MELF, TRANSIENT VOLTAGE SUPPRESSOR DIODES

## TRANSIENT VOLTAGE SUPPRESSORS 500W SERIES

SERIES TYPE	BREAK-DOWN VOLTAGE $I_{(BR)}$	TEST CURRENT $I_{(BR)}$	WORKING PEAK REVERSE VOLTAGE $V_{RWM}$	MAXIMUM REVERSE CURRENT $I_{R1}$		MAX. CLAMP. VOLTAGE $V_C(max)$ @ $I_P$ $t_p = 1ms$	MAX. PEAK PULSE CURRENT $I_P$	MAX. TEMP. COEFFICIENT $T$ $V_{(BR)}$	MAX. REVERSE CURRENT @ $T_A = 150^\circ C$	PACKAGE STYLE
				$\mu A_{dc}$	$\mu A_{dc}$					
500W	Min. Vdc	mA dc	Vdc	$\mu A_{dc}$	$\mu A_{dc}$	V(pk)	A(pk)	% / °C	$\mu A_{dc}$	
1N6102A	6.46	175	5.2	100	500	10.5	47.6	.05	4,000	
1N6103A	7.13	175	5.7	50	300	11.2	44.6	.06	750	
1N6104A	7.79	150	6.2	20	100	12.1	41.3	.06	500	
1N6105A	8.65	150	6.9	20	100	13.4	37.3	.06	300	
1N6106A	9.50	125	7.6	20	100	14.5	34.5	.07	200	
1N6107A	10.45	125	8.4	20	20	15.6	32.0	.07	200	
1N6108A	11.40	100	9.1	20	20	16.9	29.6	.07	150	
1N6109A	12.35	100	9.9	20	20	18.2	27.5	.08	150	
1N6110A	14.25	75	11.4	20	20	21.0	23.8	.08	100	
1N6111A	15.20	75	12.2	20	20	22.3	22.4	.08	100	
1N6112A	17.10	65	13.7	1.0	10	25.1	19.9	.085	100	
1N6113A	19.00	65	15.2	1.0	5.0	27.7	18.0	.085	100	
1N6114A	20.9	50	16.7	1.0	5.0	30.5	16.4	.085	100	
1N6115A	22.8	50	18.2	1.0	5.0	33.3	15.0	.09	100	
1N6116A	25.7	50	20.6	1.0	5.0	37.4	13.4	.09	100	
1N6117A	28.5	40	22.8	1.0	5.0	41.6	12.0	.09	100	
1N6118A	31.4	40	25.1	1.0	5.0	45.7	10.9	.095	100	
1N6119A	34.2	30	27.4	1.0	5.0	49.9	10.0	.095	100	
1N6120A	37.1	30	29.7	1.0	5.0	53.6	9.3	.095	100	
1N6121A	40.9	30	32.7	1.0	5.0	59.1	8.5	.095	100	
1N6122A	44.7	25	35.8	1.0	5.0	64.6	7.7	.095	100	
1N6123A	48.5	25	38.8	1.0	5.0	70.1	7.1	.095	100	
1N6124A	53.2	20	42.6	1.0	5.0	77.0	6.5	.095	100	
1N6125A	58.9	20	47.1	1.0	5.0	85.3	5.9	.100	100	
1N6126A	64.6	20	51.7	1.0	5.0	97.1	5.1	.100	100	
1N6127A	71.3	20	56.0	1.0	5.0	103.1	4.8	.100	100	
1N6128A	77.9	15	62.2	1.0	5.0	112.8	4.4	.100	100	
1N6129A	86.5	15	69.2	1.0	5.0	125.1	4.0	.100	100	
1N6130A	95.0	12	76.0	1.0	5.0	137.6	3.6	.100	100	
1N6131A	104.5	12	83.6	1.0	5.0	151.3	3.3	.100	100	
1N6132A	114.0	10	91.2	1.0	5.0	165.1	3.0	.100	100	
1N6133A	123.5	10	98.8	1.0	5.0	178.8	2.8	.105	100	
1N6134A	142.5	8.0	114.0	1.0	5.0	206.3	2.4	.105	100	
1N6135A	152	8.0	121.6	1.0	5.0	218.4	2.3	.105	100	
1N6136A	171	5.0	136.8	1.0	5.0	245.7	2.0	.110	100	
1N6137A	190	5.0	152.0	1.0	5.0	273.0	1.8	.110	100	

(Transient Voltage Suppressors, Continued on the Next Page)

## AXIAL LEAD / MELF, TRANSIENT VOLTAGE SUPPRESSOR DIODES (Continued)

## TRANSIENT VOLTAGE SUPPRESSORS. 1500W SERIES

SERIES TYPE	BREAK-DOWN VOLTAGE $V_{(BR)}$	TEST CURRENT $I_{(BR)}$	WORKING PEAK REVERSE VOLTAGE $V_{RWM}$	MAXIMUM REVERSE CURRENT $I_{R1}$		MAX. CLAMP. VOLTAGE $V_C(max)$ @ $I_P$ $t_p = 1ms$	MAX. PEAK PULSE CURRENT $I_P$	MAX. TEMP. COEFFICIENT $T$ $V_{(BR)}$	MAX. REVERSE CURRENT @ $T_A = 150^\circ C$	PACKAGE STYLE
				$\mu A_{dc}$	$\mu A_{dc}$					
1500W	Min. Vdc	mA dc	Vdc	$\mu A_{dc}$	$\mu A_{dc}$	V(pk)	A(pk)	% / °C	$\mu A_{dc}$	
1N6138A	6.46	175	5.2	100	500	10.5	142.8	.05	12,000	
1N6139A	7.13	175	5.7	50	300	11.2	133.9	.06	3,000	
1N6140A	7.79	150	6.2	20	100	12.1	124.0	.06	2,000	
1N6141A	8.65	150	6.9	20	100	13.4	111.9	.06	1,200	
1N6142A	9.50	125	7.6	20	100	14.5	103.4	.07	800	
1N6143A	10.45	125	8.4	20	20	15.6	96.2	.07	800	
1N6144A	11.40	100	9.1	20	20	16.9	88.8	.07	600	
1N6145A	12.35	100	9.9	20	20	18.2	82.4	.08	600	
1N6146A	14.25	75	11.4	20	20	21.0	71.4	.08	400	
1N6147A	15.20	75	12.2	20	20	22.3	67.3	.08	400	
1N6148A	17.10	65	13.7	1.0	10	25.1	59.8	.085	400	
1N6149A	19.00	65	15.2	1.0	5.0	27.7	54.2	.085	400	
1N6150A	20.9	50	16.7	1.0	5.0	30.5	49.2	.085	400	
1N6151A	22.8	50	18.2	1.0	5.0	33.3	45.0	.09	400	
1N6152A	25.7	50	20.6	1.0	5.0	37.4	40.1	.09	400	
1N6153A	28.5	40	22.8	1.0	5.0	41.6	36.0	.09	400	
1N6154A	31.4	40	25.1	1.0	5.0	45.7	32.8	.095	400	
1N6155A	34.2	30	27.4	1.0	5.0	49.9	30.1	.095	400	
1N6156A	37.1	30	29.7	1.0	5.0	53.6	28.0	.095	400	
1N6157A	40.9	30	32.7	1.0	5.0	59.1	25.4	.095	400	
1N6158A	44.7	25	35.8	1.0	5.0	64.6	23.2	.095	400	
1N6159A	48.5	25	38.8	1.0	5.0	70.1	21.4	.095	400	
1N6160A	53.2	20	42.6	1.0	5.0	77.0	19.5	.095	400	
1N6161A	58.9	20	47.1	1.0	5.0	85.3	17.6	.100	400	
1N6162A	64.6	20	51.7	1.0	5.0	97.1	15.4	.100	400	
1N6163A	71.3	20	56.0	1.0	5.0	103.1	14.5	.100	400	
1N6164A	77.9	15	62.2	1.0	5.0	112.8	13.3	.100	400	
1N6165A	86.5	15	69.2	1.0	5.0	125.1	12.0	.100	400	
1N6166A	95.0	12	76.0	1.0	5.0	137.6	10.9	.100	400	
1N6167A	104.5	12	83.6	1.0	5.0	151.3	9.9	.100	400	
1N6168A	114.0	10	91.2	1.0	5.0	165.1	9.1	.100	400	
1N6169A	123.5	10	98.8	1.0	5.0	178.8	8.4	.105	400	
1N6170A	142.5	8.0	114.0	1.0	5.0	206.3	7.3	.105	400	
1N6171A	152	8.0	121.6	1.0	5.0	218.4	6.9	.105	400	
1N6172A	171	5.0	136.8	1.0	5.0	245.7	6.1	.110	400	
1N6173A	190	5.0	152.0	1.0	5.0	273.0	5.5	.110	400	

**Notes:**

$P_R = 2W$  (for 500W peak pulse power devices) and  $3W$  (for 1,500W peak pulse power devices at  $T_A = +25^\circ C$ ).

$P_R = 3W$  (for 500W peak pulse power devices) and  $5W$  (for 1,500W peak pulse power devices at  $T_L = +75^\circ C$  for  $L = 0.375$  inch (9.53mm)).

$P_{PR} = 500W$  (1N6102 through 1N6137 (including A and US suffix versions) and 1,500W (1N6138 through 1N6173 (including A and US suffix versions) at  $t_p = 1ms$ ).

$-55^\circ C \leq T_{op} \leq +175^\circ C$ ,  $-55^\circ C \leq T_{stg} \leq +175^\circ C$  (ambient temperatures).

To order surface mount devices (MELFs), add the suffix US to the above listed part numbers.